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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/670,064 | 09/23/2003 | Michael L. Case | 42P17673 | 5098 |
| 8791 7590 08/20/2008 BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040 | | | | |
| EXAMINER | | | | |
| LU'ONG, ALAN H | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 2623 | | | | |
| MAIL DATE | | DELIVERY MODE | | |
| 08/20/2008 | | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/670,064

Applicant(s)

CASE, MICHAEL L.

Examiner

ALAN LUONG

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Art unit is changed into 2623

Response to Amendment

This Office Action is responsive to the Amendment filed on 01/03/2008.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1- 5, 7-10, 12-15, 17-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 6,334,217 to Kim, in view of US Publication No 2003/0194968 by Young.**

Regarding to claim 1: Fig. 1 of Kim illustrates an apparatus comprising a tuner [102 or 110] to receive " a digital TV broadcasting signal through an antenna " as modulated video signals (col.2 lines 1-12 or 13-24), the tuner having an external control interface [bus 126] (col.2 lines 49-54) to receive commands from a microprocessor [118] which receives external tuner commands from the user on remote control ,by set [102] as main tuner and [110] as a sub tuner and determines a selected channel will be changed at the second tuner as specific tuner as user's request(see Kim, col.2, col. 2 line 59 to col. 3 line 49) as converted the external tuner command to a first protocol specific to the tuner and transmits the converted

external commands to the tuner [110] for tuning the predicted channel by operating [112], [114] and [116] (see Kim, col.3, lines 50-60)

However, Kim is silent to “**commands from an external agent, the external agent being a graphics processor and a second protocol from the external agent, the second protocol being a generalized protocol**”.

In an analogous art directed toward a similar problem namely improving the results from the external agent being a graphics processor. Fig. 6A of Young illustrates structure of media mode [150] contains System ASIC 620 as **an external agent being a graphics processor** includes [630], [640], [650], [660] and [670](**Young, ¶0066**). When user remote control [532] of Fig. 5 sends command from media node 150 to media server [110] through [670], at [150] **from the external agent** ASIC [620] sends a request from user interface 694 (**¶0059 and ¶0070**) to CPU [640] for change the current view channel i.e. in case user just change channel up one step on the same Satellite tuner or from Satellite tuner to CATV tuner at specific channel as HBO or CNN as **a second protocol second protocol**, then CPU [640] retrieves channel information from memory [650] to select tuner corresponding to address of CATV tuner to map channel between 2 devices as **converts the second protocol into the first protocol being a generalized protocol** to control specific tuner for tuning desired channel from user request, (**Young, ¶0067-¶0068**). Therefore, at the time of the invention was made, it would have been obvious to one with ordinary skill in the art to modify Kim’s multiple tuners receiver with a graphics controller as taught by Young, in order to design low cost and efficient media system in that consumers are NOT required to purchase a variety of different stand-

alone decoder/playback and encoder/recorder devices, and allow subscribers to access a plurality of compatible multimedia services.

Regarding to claim 2. The apparatus of Claim 1, Kim also teaches **wherein the tuner [102] has the current view channel, after tuning channel and separating detected data, the tuner [102] further generates command responses** contains detected data and video stream format **in the first protocol** (see Kim, col.2 line 59 to col.3 line 14) **and Young also teaches the microcontroller [640] receives the command responses, converts them by executing [601] to second protocol and transmits the converted command responses to the external agent [620 of 150]** which executes [602] to receive the second protocol and forward to tuner driver [271] directs to the tuner hardware as[910] in Fig. 9b(Young, ¶0073-¶0074).

Regarding to claim 3: The apparatus of Claim 1, Fig. 1 of Kim further comprising **a second tuner [110] to receive a modulated video signal**(see Kim, col.2 lines 13-24), **the second tuner having an external interface [bus 126] (col.2 lines 49-54) to receive commands in a third protocol specific to the second tuner which is determined as main tuner by CPU [118]** and Fig. 2B indicates step 224 **wherein the microcontroller [118] receives external commands from the external agent [i.e. change channel at different frequency is current tuned at the first tuner] for the second tuner in the second protocol, converts them to the third protocol [i.e. switch the current main tuner of the first tuner to second tuner to tune new frequency for request channel], and transmits them to the second tuner** (see Kim, (col.3 line 50 to col. 4 line 11).

Regarding to claim 4: The apparatus of Claim 1, Figs. 6a-6c of Young illustrate wherein the tuner further comprises an input/output interface [670] as interactive interface at node 150, the [150] with application [694] (Young, ¶0070) to communicate data and control signals in the first protocol to external devices as media server [110] and wherein the microcontroller [640] is coupled to the input/output interface by executing application [601] to convert data and control signals between the first protocol and the second protocol (Young, ¶0073).

Regarding to claim 5: The apparatus of Claim 1, Fig. 2a of Young illustrates a system processor [block 210] couples to CPU 200, Memory 201, MPEG-2 /decoder graphics 202... (see Young, ¶0048, lines (1-5) and Fig. 6 of Young illustrates structure of [110] further comprising a system processor [ASIC 620] coupled to the microprocessor [640] and memory [650] wherein execute program and process data from [150, 151] to generate the commands in the first protocol to control the tuner [150, 151] of Fig. 1. (Young, ¶0056, ¶0066-¶0068).

Regarding to claim 6: The apparatus of Claim 1, further comprising a look-up table for the tuner and wherein the microcontroller converts the external tuner commands by applying the commands in the second protocol to the look-up table.

Regarding to claim 7: The apparatus of Claim 1, Young further teaches an instruction stack (as "stream using RTP/RTSP protocol"...specific for the tuner, see ¶0074 lines 1-6 and Fig. 2b block 252, Fig.6c block 251) and wherein the microcontroller converts the external tuner commands by applying instructions from the tuner-specific instruction stack (¶0073-¶0074)).

Regarding to claim 8: has the same limitation in claim 1, so, claim 8 is rejected by Kim and Young as discussion in claim 1

Regarding to claim 9: has the same limitation in claim 2, so, claim 9 is rejected by Kim and Young as discussion in claim 2

Regarding to claim 10: has the same limitation in claim 3, so, claim 10 is rejected by Kim and Young as discussion in claim 3

Regarding to claim 13: With respect to the article claim 13, as discussed above since the apparatus disclosed by Kim and Young anticipated every structural element and its function required by method claim 1 and since this article in claim 13 merely repeats the same method of claim 1, claim 13 must also be anticipated by Kim and Young (see claim 1 rejection).

Regarding to claim 14: With respect to the article claim 14, as discussed above since the apparatus disclosed by Kim anticipated every structural element and its function required by method claim 2 and since this article in claim 14 merely repeats the same method of claim 2, claim 14 must also be anticipated by Kim and Young (see claim 2 rejection).

Regarding to claim 15: With respect to the article claim 15, as discussed above since the apparatus disclosed by Kim anticipated every structural element and its function required by method claim 3 and since this article in claim 15 merely repeats the same method of claim 3, claim 15 must also be anticipated by Kim and Young. (see claim 3 rejection).

Regarding to claim 12 and 17: With respect to the method claim 12 and 17, as discussed above since the apparatus disclosed by Kim anticipated every structural element and its function required by apparatus claim 7 in view of Young and since this method in claim 12 and 17 merely repeat the limitation of claim 7, claim 12 and 17 have the same ground rejection as claim 7.

Regarding to claim 18: With respect to the video tuner claim 18, as discussed above since the apparatus disclosed by Kim and Young anticipated every structural element and its function of system processor as combination of function of CPU and a graphics controller required by an apparatus claim 1 and since this video tuner in claim 18 merely repeats the same scope of claim 1, claim 18 must also be anticipated by Kim and Young (see claim 1 rejection).

Regarding to claim 19: With respect to the video tuner claim 19, as discussed above since the apparatus disclosed by Kim and Young anticipated every structural element and its function required by an apparatus claim 2 and since this video tuner in claim 19 merely repeats the same scope of claim 2, claim 19 must also be anticipated by Kim and Young (see claim 2 rejection).

Regarding to claim 20: With respect to the video tuner claim 20, as discussed above since the apparatus disclosed by Kim and Young anticipated every structural element and its function required by an apparatus claim 3 and since this video tuner in claim 20 merely repeats the same scope of claim 3, claim 20 must also be anticipated by Kim and Young (see claim 3 rejection).

Regarding to claim 21: With respect to the video tuner claim 21, as discussed above since the apparatus disclosed by Kim and Young anticipated every structural element and its function required by an apparatus claim 4 and since this video tuner in claim 21 merely repeats the same scope of claim 4, claim 20 must also be anticipated by Kim and Young (see claim 4 rejection).

Regarding to claim 23 With respect to the video tuner claim 23, as discussed above since the apparatus disclosed by Kim and Young anticipated every structural element and its function required by an apparatus claim 7 and since this video tuner in claim 23 merely repeats the same scope of claim 7, claim 23 must also be anticipated by Kim and Young (see claim 7 rejection).

6. **Claims 6, 11, 16 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kim and Young**, in view of **US Patent No 6,772,434 (US'434) to Godwin**

Regarding to claim 6: Kim teaches the channel decoder converts the baseband into a data bit stream under control by microprocessor (col.2 lines 7-12) and **wherein the microprocessor converts the external tuner commands by applying the commands in the second protocol** (col.2 lines 25-31), but fails to disclose a look-up table for the tuner.

In an analogous art directed toward a similar problem namely improving the results from a look-up table for the tuner. Fig. 3A of Godwin shows a data stream and Fig. 3B shows a data package as **a look-up table** (Godwin, col.5 lines 13-52) **for the tuner** (col. 4 line 61 to col.5 line 5). Therefore, it would have been obvious to a person

having an ordinary skill in the art at the time of the invention was made to modify an apparatus includes graphics controller of Kim and Young, with a data stream and a data packet for tuner as Godwin's disclosure; in order to provide a system for an integrated presentation of the media programs from primary service providers and secondary service providers, and an integrated technique for managing conditional access to the programs provided by different service providers.

Regarding to claim 11 and 16: With respect to the method claim 11 and 16, as discussed above since the apparatus disclosed by Kim and Young anticipated every structural element and its function required by apparatus claim 6 in view of Godwin and since this method in claim 11 and 16 merely repeat the limitation of claim 6, claim 11 and 16 have the same ground rejection as claim 6.

Regarding to claim 22: With respect to the method claim 22, as discussed above since the apparatus disclosed by Kim and Young anticipated every structural element and its function required by apparatus claim 6 in view of Godwin and since this method in claim 22 merely repeat the limitation of claim 6, claim 22 have the same ground rejection as claim 6.

Response to Arguments

Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Applicants respectfully submit that: "Second, the external agent is identified as a graphics processor. In Kim, there is only one processor. The Examiner has identified

Young as showing an ASIC 210 between the modules and a CPU 200. Young, however, does not identify if this ASIC converts protocols or how commands are sent between the modules and the CPU, if they are. It would appear that the ASIC has more to do with transcoding the video and audio signals than with commands. (Remark; page 12).

However, after a careful consideration of the arguments presented, the Examiner must respectfully disagree for the reasons that Young explicitly disclosed "ASIC 620 as a graphics controller or a system controller is connected with CPU 640, memory 650, I/O interface 670, Tuners in module 150, 151, 240, etc.. and bus lines 610. In communication with other devices above, ASIC must get request from user's command from I/O interface or interactive TV display and sends request to CPU by a protocol or software language (Fig. 6a, 6c, ¶0073-¶0074)). From there, CPU must use another machine language or another protocol to identify device address associated with user's request by converting the protocol from sender and control operation of device which is connected to CPU by bus line. (See Young, ¶0067-¶0068 and ¶0073-¶0074)).

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALAN LUONG whose telephone number is (571)270-5091. The examiner can normally be reached on Mon.-Thurs., 8:00am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. L./

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Examiner, Art Unit 2623

Dated August 14, 2008

/Scott Beliveau/

Supervisory Patent Examiner, Art Unit 2623